

**UNIFIED SAN DIEGO COUNTY
EMERGENCY SERVICES ORGANIZATION
OPERATIONAL AREA EMERGENCY PLAN**

ANNEX H

ENVIRONMENTAL HEALTH OPERATIONS

March 2000

UNIFIED SAN DIEGO COUNTY EMERGENCY SERVICES ORGANIZATION

ANNEX H

ENVIRONMENTAL HEALTH OPERATIONS

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UNIFIED SAN DIEGO COUNTY EMERGENCY SERVICES ORGANIZATION

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ENVIRONMENTAL HEALTH OPERATIONS

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ANNEX H ENVIRONMENTAL HEALTH OPERATIONS

I. GENERAL

The Environmental Health Operations Annex to the San Diego County Operational Area Emergency Plan describes the basic concepts, policies and procedures for providing environmental health services in the event of any disaster. This Annex serves as the unifying environmental health document for the County of San Diego and the cities in the County, as authorized by the Emergency Services Agreement.

Note: This Annex is not applicable for incidents at the San Onofre Nuclear Generating Station (SONGS). For all events at SONGS, refer to the San Diego County Nuclear Power Station Emergency Response Plan.

A. Purpose

To establish emergency environmental health operations, assign responsibilities, and provide actions and responses to environmental health problems associated with disasters.

B. Goals and Objectives

The overall goal of environmental health disaster operations is to:

- Minimize loss of life and human suffering, prevent disease, and promote optimum health by controlling environmental factors.

The overall objectives of environmental health disaster operations are to:

- Provide leadership and guidance in all environmental health-related incidents.
- Provide environmental health protection measures.
- Provide food handling and mass feeding sanitation service in emergency facilities.
- Inspect and advise on general sanitation matters.
- Coordinate environmental health-related activities among other local public and private response agencies and groups.
- Perform structural damage assessments

C. Concept of Operations

There are three levels of emergency response. These levels are based on the nature and severity of the situation and the availability of resources. These three levels are described in the Basic Plan.

LEVEL I -

- The scope and degree of the emergency can be handled effectively with the environmental health resources available within the Operational Area.
- The countywide emergency response system and the Emergency Operations Center (EOC) may or may not be activated.

LEVEL II -

- There are heavy casualties, severe damage, and severe impact upon resources available to handle the emergency; requiring mobilization of the emergency organization and the use of mutual aid.
- Affected government agencies will be notified and the Operational Area EOC will be activated.
- Requests for environmental health mutual aid to the State Department of Health Services (DHS) will be made via the Regional Disaster Medical/Health Coordinator.
- Assistance from other governmental agencies such as the National Guard and other military may be required.

LEVEL III -

- The Operational Area Emergency Operations Center will be activated and fully staffed.
- Assistance will be required from both state and federal resources.

D. Plan Activation and Termination

Activation and termination of this Annex shall be by the direction of (1) the County's Chief Administrative Officer (CAO) in that capacity, or as Emergency Services Coordinator of the Unified San Diego County Emergency Services Organization; or (2) a designated Assistant CAO; or (3) the Director, Office of Disaster Preparedness or designated representative; or (4) the Director, Department of Environmental Health or designated representative.

Upon activation, the Director, Department of Environmental Health, determines the extent of environmental health services needed for the disaster and notifies the appropriate divisions.

II. ORGANIZATION

A. City Emergency Operations Centers (EOCs)

Each city has a central facility designated as an EOC. From the EOC, disaster operations are directed or coordinated. It is activated when a disaster occurs and is staffed by city employees from departments with emergency responsibilities, as well as liaison representatives from other agencies and jurisdictions.

City plans may call for an environmental health liaison representative to be present when the EOC is activated. In each city, the City Manager is designated as Director of Emergency Services, by ordinance, and directs emergency operations from the EOC.

B. Operational Area EOC

The County EOC also serves as the Operational Area EOC and performs the same function as the city EOCs, with the Chief Administrative Officer serving as Director of Emergency Services. The CAO also functions as the Emergency Services Coordinator for the Operational Area.

The Operational Area EOC is located at 5555 Overland Avenue, County Operations Center, Kearny Mesa and is used as the central point for resource acquisition and allocation, as well as coordination. The Environmental Health Section of the EOC (Figure 1) is normally activated when the EOC is fully activated. It is staffed by pre-designated environmental health personnel who coordinate the environmental health response for the Operational Area. The EOC environmental health staff serve as advisors to the Emergency Services Coordinator and the Management Section and make decisions about resource allocation and priorities, and other public environmental health matters.

1. Emergency Services Coordinator (Normally the CAO) - directs or coordinates the Emergency Services Organization and the emergency management program. In a disaster located entirely within the County unincorporated area, the CAO is the Director of emergency operations. In a disaster involving more than one jurisdiction, the CAO serves as Coordinator of emergency operations.
2. Director, Department of Environmental Health (DEH) - reports to the CAO and is primarily responsible for providing and coordinating the provision of county-wide environmental health and sanitation services. The Director, DEH, identifies environmental health problems, determines the resources needed, and coordinates resource allocation. Additionally, the Director coordinates activities with public works agencies, fire departments, and utilities (sewage, water, etc.). The Director advises the Emergency Services Coordinator of the need for mutual aid.
3. Assistant Director, Department of Environmental Health (DEH) - Reports to the Director of Environmental Health and is primarily responsible for implementing and coordinating the delivery of environmental health and sanitation services. The Assistant Director acts for the Director when necessary, identifies environmental health problems and directs and coordinates the Division Chiefs in resource

allocation and service delivery. Additionally the Assistant Director coordinates activities with public works agencies, public health, fire departments and other public service providers.

4. Chief, DEH Hazardous Materials Division, or Designee - reports to the Director, DEH, and is responsible for coordinating hazardous materials personnel and resources. The HAZMAT Coordinator maintains an active liaison with the San Diego Fire Department to coordinate a joint response.
5. Chief, DEH Food and Housing Division, or Designee - reports to the Director, DEH, and is responsible for supervising the food delivery system and assists in water supply, waste disposal, and housing.
6. Chief, Land & Water Quality Division, or Designee - reports to the Director, DEH, and is responsible for monitoring and evaluating the water supply and for coordinating Site Assessment and Mitigation Program (SAM) personnel and resources. The SAM coordinator maintains an active liaison with the Fire Departments, Building Departments and the Regional Water Quality Control Board to coordinate activities related to leaking underground storage tanks and other chemical contamination issues. The Chief is also responsible for determining the risks/hazards for the disposal of sewage and the establishment of quarantine areas in the event of sewage contamination.
7. Senior Health Physicist, DEH Radiological Health Division, or Designee - reports to the Chief, Hazardous Materials Division, and advises on all radiological hazards as they occur.
8. Supervising Vector Ecologist, Community Health Division, or Designee - reports to the Chief of Community Health who reports to the Director, DEH, and is responsible for establishing methods and procedures for vector control activities to include the control of flies, mosquitos, human body pests, ectoparasites and rodents as well as the supervision of the disposal of dead animals.
9. Supervising Environmental Health Specialist, Solid Waste Branch or Designee - reports to the Chief of Community Health who reports to the Director, DEH, and is responsible for the monitoring and evaluating the management of solid waste. The Chief is also responsible for establishing emergency Notices to allow local landfills and transfer stations to temporarily exceed their permitted tonnages in order to manage additional volumes of solid waste resulting from a disaster.

III. ROLES AND RESPONSIBILITIES

A. All Environmental Health Agencies/Divisions

1. Prepare Standard Operating Procedures (SOPs) and functional checklists for environmental health response to a disaster, including a system for automatic reporting of pre-designated personnel to assigned disaster posts.

2. Train personnel and alternates.

B. County Department of Environmental Health

1. Writes and updates the Environmental Health Annex and any other emergency environmental health plans and procedures.
2. Coordinates environmental health disaster operations within the Operational Area.
3. Coordinates the procurement, allocation and distribution of environmental health resources required to support disaster environmental health operations during disasters.
4. Develops and maintains a capability for identifying environmental health resources within the Operational Area.
5. Coordinates all environmental health related activities among other local public and private response agencies or groups, as well as state and federal agencies.
6. Requests and responds to requests from the Regional Disaster Medical Health Coordinator for disaster assistance.

C. Food and Housing Division

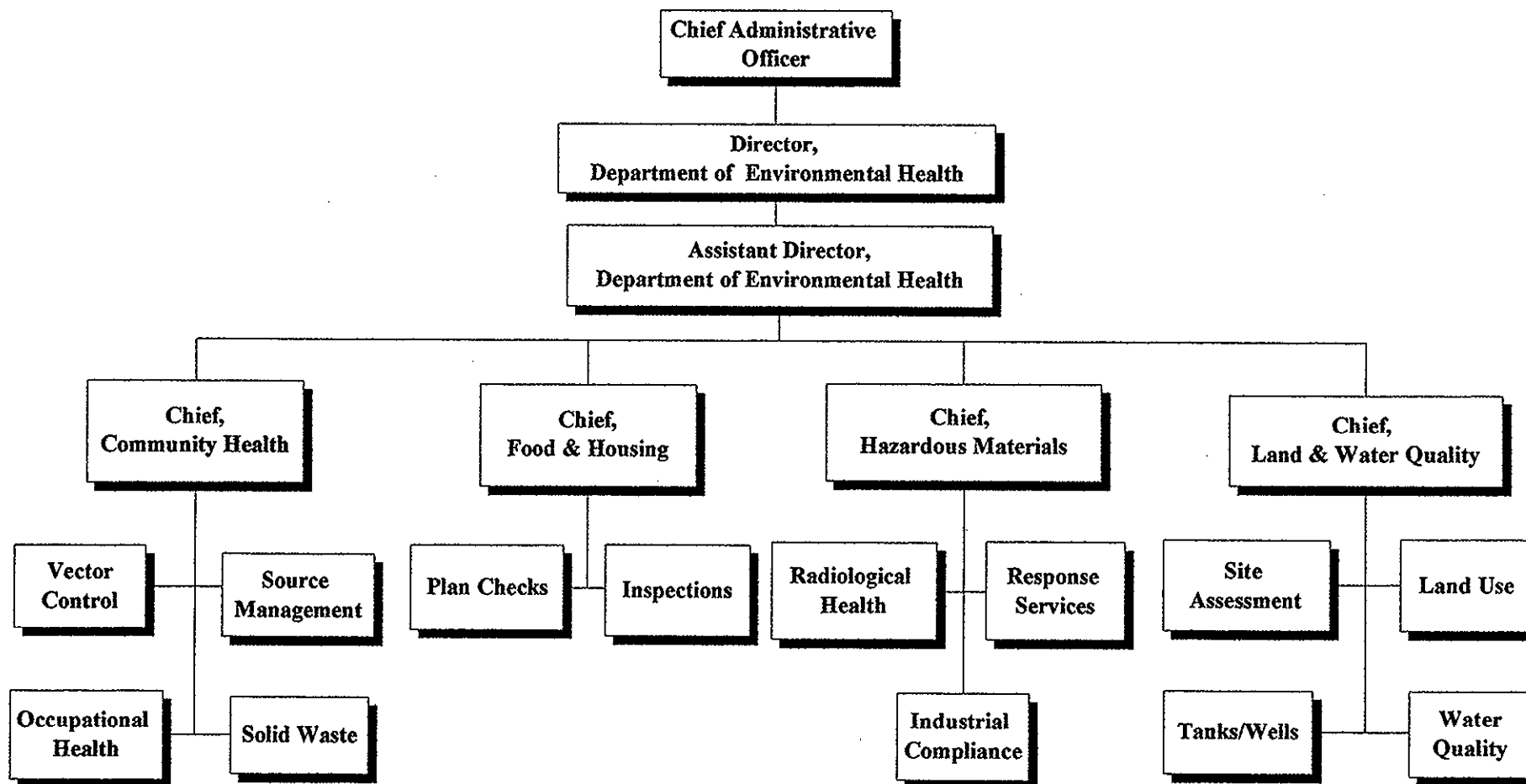
1. Supervises the food delivery system and assists in water supply, waste disposal, and housing.
2. Coordinates the inspections for purity and usability of vital foodstuffs, water, and other consumables.
3. Coordinates the provision of temporary measures for sanitary disposal of human waste and other refuse.
4. Inspects and advises on general sanitation matters for mass feeding and sanitary facilities in emergency shelters.
5. Conducts inspections of health hazards in damaged buildings and housing facilities.

D. Community Health Division, Vector Control Program

1. Establishes methods and procedures for vector control activities to include the control of flies, mosquitos, human body pests, and ectoparasites.
2. Develops and supervises methods and procedures for control of rodents.
3. Supervises the disposal of dead animals.
4. Conducts surveys and surveillance to determine potential for vector-borne disease transmission and control measures needed to prevent and control vectors.

Figure 1

**ENVIRONMENTAL HEALTH OPERATIONS AT THE
SAN DIEGO COUNTY OPERATIONAL AREA EOC**



E. Hazardous Materials Division, Radiological Health Program

1. In conjunction with the County Radiological Officer:
 - a. Advises on radioactive contamination of the environment and the population.
 - b. Assists with the coordination of radiation monitoring teams as well as decontamination activities.
 - c. Advises on control measures and recovery efforts from radiological incidents.
 - d. Advises County Health Officer (CHO) of the need for administration of potassium iodide (KI) to emergency workers.
2. Appendix II discusses emergency response to various radiological incidents.

F. Hazardous Materials Division

1. Conducts environmental surveys to identify the hazardous materials released.
2. Evaluates the risks that the hazardous substances may pose to the general public and environment.
3. Advises on mitigation measures necessary to modify or reduce adverse conditions effecting public or environmental health.
4. Coordinates environmental health mitigation and response activities with other public and private response organizations.

G. Land & Water Quality Division

1. Land Use and Water Quality
 - a. Determines the risks and hazards for the disposal of sewage.
 - b. Establishes quarantine areas in the event of sewage contamination.
 - c. Evaluates sources of water for use as a potable water supply.
 - d. Establishes procedures for the sanitary transportation and treatment of water to be used as a water supply.
2. Site Assessment
 - a. Conducts environmental surveys to determine the extent of releases from underground storage tanks and other chemical contamination sources.

- b. Evaluates the risks posed to public health and water resources from hazardous substance releases.
- c. Advises on mitigation measures necessary to mitigate hazardous substance releases from abandoned or contaminated sites.
- d. Coordinates site assessment and mitigation activities with other public agencies and private entities.

H. Community Health Division, Solid Waste Local Enforcement Agency (LEA)

- 1. Approves waiver requirements of State standards for solid waste operators to accept disaster-related solid waste.
- 2. Reviews the handling and acceptance of solid waste with haulers and operators.
- 3. Monitors the storage, handling, and disposal of solid waste in the LEA's jurisdiction.
- 4. Coordinates the disposal of special wastes, such as food waste generated from mass feeding centers and quarantines, and human waste generated from lack of sanitary facilities.
- 5. Monitors the potential migration of landfill gas due to damaged gas control systems or emergency construction activities adjacent to landfills.

I. Office of Disaster Preparedness (ODP)

- 1. Assists with environmental health disaster planning and training.
- 2. Coordinates, through the Logistics Section, efforts to obtain resources both within the county and out of the county, including supplies and logistical support.
- 3. Requests and obtains, via the Logistics Section, military assistance in accordance with established protocols and procedures.
- 4. Activates, manages, and staffs the Operational Area EOC.
- 5. Assists with recovery efforts, particularly in obtaining state and federal reimbursement funds.

J. State (See Attachment A)

- 1. Responds to requests for resources from the Operational Area.
- 2. The Director, State Department of Health Services, serves as the State Director of Public Health and has the overall responsibility of coordinating statewide disaster environmental health operations and support requirements.

K. Federal (See Attachment B)

1. Public Health Service

- Assists state and local communities in taking protective and remedial measures for ensuring sanitary food and potable water supplies; adequate sanitary systems; rodent, insect, and pest control; care of sick and injured; and control of communicable disease.
- Assigns professional and technical personnel to augment state and local forces.

2. Food and Drug Administration

- Works with state and local governments in establishing environmental health controls through the decontamination or condemnation of contaminated food and drugs.

IV. FUNCTIONS

A. Mass Feeding Services

Several aspects of the food delivery system will need supervision to prevent the spread of disease and the spoilage or waste of food. Some of the most important aspects are:

1. Quality control of incoming foods in order to detect spoilage or contamination.
2. Quality control of water supplied to food preparation centers.
3. Provision for proper storage, the cooking of food and maintenance of food temperatures.
4. Provision for proper disposal of solid and liquid wastes.
5. Provision for proper washing and sanitizing of utensils.
6. Supervision of food preparation and serving.
7. Supervision of cleaning of all food handling and serving areas.
8. Control of insects and rodents in food stores, kitchens, and eating areas.
9. Management of personnel, including training, health checks, and assignment at sanitary facilities.

B. Sanitation

Several aspects of waste disposal and solid waste management will need supervision to prevent the spread of disease. These may include:

1. Management and supervision of pumping trucks used to remove liquid wastes.
2. Management and supervision of sewage disposal units including community trench latrines, pit privies, and mobile latrines or chemical toilets.
3. Management and supervision of organic and inorganic waste at mass feeding and care facilities.
4. Provision for the proper disposal of collected waste in an approved landfill, or by burial, incineration or open dumping as a last resort.

C. Vector Control

Vectors are organisms that transmit disease or cause annoyance. Vectors are present in virtually every environment, and at times are involved in the transmission of serious diseases, particularly under crowded or poor sanitary conditions. Vector control functions during disasters may include:

1. Mapping of vector sources to determine the extent of infestations, potential for disease occurrence, level of nuisance to be eliminated, and amount of damage to be expected.
2. Identification, control and elimination of mosquito and fly breeding sources and rodent and cockroach infestations.
3. Implementation of a vector awareness education program to enhance public cooperation.

D. Emergency Water Supply

During emergency conditions, most major water districts have emergency and mutual aid agreements to try to supply water to the most critical needs. Where potable water sources may be limited, Environmental Health functions to:

1. Provide proper health and disinfection information when alternate water resources are used, such as trucked-in water, use of agricultural wells, streams, pools and ponds.
2. Ensure the safety and proper disinfection of potable water sources at Field Treatment Sites, mass feeding and housing and shelter areas.
3. Assist the Public Health Laboratory in sampling water supplies to test for the presence of coliform bacteria.

The San Diego County Operational Area Emergency Water Contingencies Plan discusses the response to a catastrophic interruption to the Operational Area's water supply. It is incorporated into this Annex by reference.

E. Hazardous Materials Management

The Hazardous Materials Division (HMD) of the Department of Environmental Health is trained and equipped to respond to hazardous materials incidents associated with a chemical emergency. Through an agreement between the Unified Disaster Council members, HMD, and the San Diego City Fire Department, the Hazardous Incident Response Team (HIRT) was formed to provide a regional response program, serving the San Diego County Operational Area.

Upon activation, the responding unit will proceed to the incident site and coordinate with other on-site agencies, such as the CHP, police, or fire departments.

HMD will assist the designated Incident Commander as requested and will offer the following services:

1. Conduct environmental surveys to identify the hazardous materials and wastes.
2. Continuously monitor the status of the incident to determine the population at risk, the effect on environmentally sensitive areas, and the impact to economically sensitive areas.
3. Conduct field sampling to determine the extent of contamination in soil, water, or air.
4. Conduct on-site screening for identification of chemical unknowns.
5. Provide laboratory analysis of unidentified hazardous materials which may adversely affect individuals, the general public, or the environment, on an as needed basis.
6. Provide health and safety information to all response agencies and act as an on-site safety officer as necessary.
7. Assist the Incident Commander in determining the necessity for area evacuation and/or post incident site entry.
8. Make recommendations to the Incident Commander and other private or public response agencies concerning methods to be used in spill control, clean-up and site restoration.
9. Evaluate the adequacy of final site clean-up and help coordinate the removal of the hazardous materials.

10. As necessary, assist the Incident Commander in obtaining outside financial and other resources from State and/or Federal agencies to help in any environmental cleanup in the absence of a responsible party.
11. Provide technical information concerning the characteristics of released or spilled substances to the medical and other response agencies having need of such information.

Responses to a significant oil spill impacting or with the potential to impact the San Diego Operational Area are addressed in the San Diego County Operational Area Oil Spill Contingency Element of the Area Hazardous Materials Plan.

F. Land and Water Quality

The Land & Water Quality Division (LWQD) of the Department of Environmental Health regulates water and wastewater issues, mobile home parks, the permitting of new, repaired, upgraded and closure of underground storage tanks, monitoring and drinking water wells, and subsurface disposal systems. In the event of an emergency, LWQD staff will be able to expedite the review of emergency plans for the repair or reconstruction of below-grade structures containing hazardous substances and private drinking water wells.

LWQD will assist other departments and divisions in the following:

1. Provide technical information concerning the characteristics of released or spilled substances from underground storage tanks and other facilities containing hazardous substances and evaluate remediation strategies and the final site cleanup.
2. Expedite the review of plans for the repair of subsurface disposal system, USTs, drinking and monitoring wells.
3. Assist in the inspection of mobile home parks in the unincorporated areas and contract cities for safety and habitability.
4. Assist with conducting environmental surveys of permitted establishments for releases of hazardous substances, septic wastes, and non-potable drinking water supplies.

G. Radiological Health Protection

1. Monitoring Teams

In the event of emergencies involving radioactive materials, the Department of Environmental Health will assist in the effort to save lives and minimize radiation exposure and environmental contamination. The Hazardous Materials Division and the Oceanside Fire Department both have teams that are trained as radiological monitors. The HMD team may be activated by the Director, Department of Environmental Health, or by the environmental health specialist who assumes responsibility at the time of disaster mobilization. The Oceanside Fire Department

team may be activated through the Office of Disaster Preparedness. In addition, several other fire agencies within the Operational Area have trained radiological monitors. These may be requested through the Office of Disaster Preparedness.

In the event of a large radiological incident which exceeds the Operational Area's response capabilities, the Radiological Health Program of the DEH Hazardous Materials Division, in conjunction with the Office of Disaster Preparedness would request State and Federal resources through the Logistics Section of the EOC and coordinate response activities through the EOC Operations Section.

The Monitoring Teams receive orders from or respond to the following:

- a. The County Health Officer or designee.
- b. The Director, Department of Environmental Health, or designee.
- c. The Environmental Health Specialist in Command in lieu of the Director, Department of Environmental Health.
- d. The Director of the Office of Disaster Preparedness (ODP) or designee.

2. Equipment

- a. The Oceanside Fire Department has field monitoring kits which include:
 - Personnel monitoring equipment
 - Dose rate measuring equipment
 - Iodine/Particulate Air Sampler (2)
 - Protective clothing and equipment
- b. HMD has personnel monitoring equipment available.
- c. ODP has a stock of radiological survey instruments and a portable portal radiation monitor available.
- d. Additional information regarding the response to radiological incidents is found in Appendix II.

H. Local Enforcement Agency

The Local Enforcement Agency (LEA) of the Department of Environmental Health regulates solid waste issues in the County. After disasters that impact solid waste handling and disposal, the California Integrated Waste Management Board is authorized to adopt emergency regulations for the LEA to provide maximum availability of handling, processing, transportation, storage and disposal capacity through the period of increased need. In addition, the LEA has trained staff to field monitor any potential public health and safety issues related to the migration of landfill gas. The LEA will coordinate issues and environmental concerns related to solid waste and disposal sites with other regulatory

agencies, the operator/owners, and the community. These issues may include odors, noise, dust, longer operating hours at disposal sites, contaminated water, vectors, and landfill gas. In addition, the LEA will investigate and monitor solid waste issues in the general community related to storage and illegal disposal of solid waste.

I. Resources

The Department of Environmental Health develops and maintains a capability for identifying health resources within the Operational Area. Additionally, the Department of Environmental Health, through the Logistics Section of the Operational Area EOC, is responsible for the procurement, allocation and distribution of all environmental resources required to support disaster environmental health operations.

Environmental Health Disaster Manual

The Environmental Health Disaster Manual includes information, Standard Operating Procedures and checklists to facilitate disaster environmental health response. The following information is included in the manual.

- Notification and Recall lists of Public Health Personnel
- Public Health Emergency Telephone Numbers
- Designated Amateur Radio Operators
- Hazardous Material Haulers and other Emergency Transportation Resources
- Septic Tank Pumps
- Emergency Chemical Toilet Suppliers
- National Guard Resources (Public Health specific)
- Location of Emergency Water Supplies
- Portable Generators
- Water Purveyors
- Well Locations

- Pesticide Emergencies Reference List
- Miscellaneous Support Agencies
- Chemical and Biological Sampling Devices
- List of analytical laboratories
- For Radiological Health Protection, the following information is available:

- Members of Radiation Monitoring Teams
- Location of Field Monitoring Equipment
- Location of Potassium Iodide and issue log sheets
- Hospitals with capability to handle ill or injured patients contaminated with radioactive material

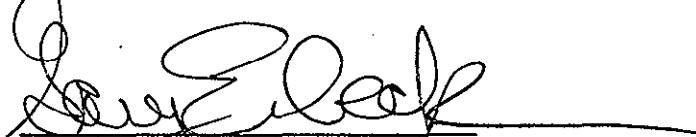
J. State Mutual Aid

The State of California is divided into six mutual aid regions. The San Diego County Operational Area is in Region VI which also includes the Counties of Mono, Inyo, San Bernardino, Riverside, and Imperial. In the event that local public health resources are unable

to meet the needs of the Operational Area, assistance from the neighboring jurisdictions may be requested through the Regional Disaster Medical/Health Coordinator or the Office of Emergency Services (Regional EOC). The Regional Coordinator coordinates the provision of medical and public health resources to the Operational Area. If a state response is indicated, the Regional Coordinator functions are subsumed under the overall State medical and health response. Disaster environmental health requests are consolidated at the Operational Area EOC and provided to the Regional Coordinator at the REOC who transmits it to the State Operations Center (SOC). The Regional Coordinator will perform the following functions:

- Coordinate the acquisition and allocation of critical public and private medical and public health resources required to support disaster medical operations.
- Coordinate medical resources in unaffected counties in the Region for acceptance of casualties.
- Request assistance from the Emergency Medical Services Authority (EMSA) and the State Department of Health Services (DHS) as needed.

AUTHENTICATION:



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5/10/00
Date

ATTACHMENT A STATE RESPONSIBILITIES

The Director, State Department of Public Health serves as State Director of Public Health and will have the overall responsibility for coordinating statewide disaster environmental health operations and support.

The following state agencies have varied capabilities and responsibilities for providing support to environmental health disaster operations.

Department of Health Services (DHS)

DHS is primarily responsible, under the State Director of Public Health, for the administration and coordination of a statewide disaster environmental health program. This includes coordinating, supervising, and assisting those essential services required to do the following.

1. Assure availability of safe drinking water.
2. Prevent and control communicable disease.
3. Provide technical assistance in the safe operation of sewage collection, treatment, and disposal systems.
4. Assure prevention and control of vectors, including flies, mosquitoes, and rodents.
5. Assure observance of health aspects in management of solid waste disposal, including proper disposal of dead animals and human remains.
6. Assure safe management of hazardous wastes, including handling, transportation, and disposal.
7. Ensure safety of emergency supplies of food, drugs, medical devices, and other products.
8. Ensure rapid restoration or replacement of facilities for processing, storing, and distributing food, drugs, medical devices, cosmetics, and other products.
9. Rapidly establish measures to mitigate damage to environmental health from radiological accidents, including safety criteria for recovery, reoccupancy, and rehabilitation of contaminated areas.
10. Provide support to the California Air Resources Board in carrying out the public health aspects of the California Air Pollution Emergency Plan.
11. Provide technical assistance for incidents involving radioactive material.

ATTACHMENT A
STATE RESPONSIBILITIES
(Continued)

Department of Food and Agriculture

1. Administers programs for the control and eradication of diseases, pests or chemicals affecting animals, poultry or crops.
2. Provides information on the protection of human and animal food from contamination by harmful residues or chemicals.
3. Provides entomological and veterinary assistance in support of emergency operations.

California Environmental Protection Agency - Air Resources Board

1. Develops plans to prevent substantial endangerment to the health of persons by anticipating and preventing or abating air pollution emergencies.
2. Coordinates the execution of air pollution emergency plans with County and Regional Air Pollution Control Districts, State OES and other public agencies.
3. Coordinates the monitoring of air quality and issues bulletins consistent with public safety as required by the Department of Health Services.

California Environmental Protection Agency - State Water Resources Control Board

1. Assures safe operation of sewage collection, treatment, and disposal systems.
2. Provides water quality advice and support in emergency operations.

California Integrated Waste Management Board

1. Assures proper disposal of solid wastes.
2. Prepares and adopts emergency regulations for LEAs to provide maximum availability for the proper disposal of solid waste.

ATTACHMENT B FEDERAL RESPONSIBILITIES

The Department of Health and Human Services, operating under its own statutory authority or following a Presidential Declaration of an EMERGENCY, may provide disaster environmental health services.

Public Health Service

Has the primary federal responsibility for activities associated with health hazards resulting from emergencies and will:

- Assist state and local communities in taking protective and remedial measures for ensuring sanitary food and potable water supplies; adequate sanitary systems; rodent, insect, and pest control; care of sick and injured; and control of communicable disease.
- Assign professional and technical personnel to augment state and local forces.

Food and Drug Administration

Works with state and local governments in establishing public health controls through the decontamination or condemnation of contaminated food and drugs.

Policies and Procedures

1. If a local situation requires the regulation of a local health department in accordance with Section 207 of the Health and Safety Code, the State Department of Health Services will notify the appropriate health officer and assume control of local public health functions.
2. If local resources (both public and private) are inadequate to cope with the situation(s), required support will be requested through the Operational Area EOC to the appropriate OES Mutual Aid Regional Emergency Operations Center (REOC). If the requirement cannot be met through resources available within the counties in the Region, the REOC staff or Director will request assistance from the State Operations Center (SOC) in Sacramento who will then forward the request to the State Department of Health Services for assistance.
3. The provision of Federal resources prior to a Presidential declaration of an EMERGENCY is justified where prompt action is essential for the protection of life and property. After a Presidential declaration is made, and upon instructions from the Director, Region IX, Federal Emergency Management Agency, Federal agencies will make their resources available to support local and state emergency public health and sanitation efforts.

**APPENDIX I-1
DEPARTMENT OF ENVIRONMENTAL HEALTH
EMERGENCY ACTION CHECKLIST
RESPONSE TO A MAJOR EARTHQUAKE**

| <u>Action</u> | <u>Responsibility</u> |
|---|------------------------------|
| Conduct field survey to detect damage to water and sewage systems. | DEH |
| Locate and check status of potable water sources. | DEH |
| IF LITTLE OR NO DAMAGE IS REPORTED, PREPARE TO SUPPORT MORE HEAVILY DAMAGED JURISDICTIONS. | |
| IF EXTENSIVE DAMAGE IS REPORTED, TAKE THE FOLLOWING ACTIONS AS REQUIRED (Water, Sewage, Food, Housing, others). | |
| Aid in the development of emergency community water supplies. | Food & Housing |
| Give guidance and supervise chlorination of all water supplies. | Food & Housing |
| Coordinate the transportation of water to points of consumption. | Land & Water Quality |
| Supervise the development of new and repaired water systems. | Land & Water Quality |
| Conduct field survey to detect damage to sewage systems. | Land & Water Quality |
| Coordinate transportation and use of emergency chemical toilets and other temporary facilities for the disposal of human waste and other infected refuse. | Land & Water Quality |
| Coordinate the procurement of portable sewage pumps. | Land & Water Quality |
| Supervise the collection and disposal of toilet wastes. | Land & Water Quality |
| Supervise the development of mass housing and sewage disposal facilities. | Land & Water Quality |
| Provide sanitation inspection services in emergency facilities. | Land & Water Quality |
| Supervise the rehabilitation of sewage plants and systems. | Land & Water Quality |

Major Earthquake

Action

Responsibility

Inspect foodstuffs, water, drugs, and other consumables for purity and usability.

Food & Housing

Supervise sanitation in commercial mass feeding units.

Food & Housing

Supervise food salvage operations.

Food & Housing

Conduct inspection of health hazards in damaged buildings.

Food & Housing

Assist in the selection and development of public emergency shelters.

Food & Housing

Provide mutual aid when requested.

DEH

Establish methods and procedures for control of flies, mosquitoes, human body pests, and ectoparasites.

Community Health

Develop and supervise methods and procedures for control of rodents.

Community Health

Conduct surveys and surveillance to determine densities, species, distribution, disease-bearing and control measures needed to prevent and control vectors.

Community Health

Supervise disposal of radioactive waste.

Hazardous Materials

Supervise radiological monitoring and decontamination (if required) of evacuees housed in emergency shelters and incoming patients in medical centers.

Hazardous Materials

Assess risk to public health and safety and the environment from releases of hazardous materials.

Hazardous Materials

Assess risk to public health and water resources from subsurface septic tank releases.

Land and Water Quality

Assess risk to the public health and water resources from public and private potable water supply well failures.

Land & Water Quality

Major Earthquake

Action

Responsibility

Coordinate risk assessment activities with other responsible agencies.

Hazardous Materials

Survey underground storage tank sites to determine if releases may have occurred.

Land & Water Quality

Assess risk to public health and water resources from hazardous substance releases.

Land & Water Quality

Coordinate site assessment and mitigation activities with other public agencies and private entities.

Land & Water Quality

Approves waiver requirements based on emergency regulations adopted by the California Integrated Waste Management Board.

Community Health

Review the handling and acceptance of solid waste with solid waste haulers and disposal site operators.

Community Health

Monitors the storage, handling and disposal of solid waste.

Community Health

Monitors the potential migration of landfill gas.

Community Health

Supervise the collection, storage, and disposal of all garbage and refuse.

Food & Housing

Supervise the cleaning and decontamination of trucks to be used for hauling of water, milk, or other products.

Food & Housing

Assess the risk to public health and water resources from subsurface septic tank releases.

Land & Water Quality

Assess the risk to public health and water resources from public and private potable water supply well failures.

Land & Water Quality

**APPENDIX I-2
DEPARTMENT OF ENVIRONMENTAL HEALTH
EMERGENCY ACTION CHECKLIST**

RESPONSE TO A HAZARDOUS MATERIALS INCIDENT

Action

Responsibility

Coordinate with the Medical Examiner, on health problems associated with the disposition of the dead.

Hazardous Materials

PRELIMINARY ASSESSMENT

Conduct environmental surveys to identify the hazardous materials released. Determine the population at risk, and characterize the degree of hazard.

Hazardous Materials

Conduct field sampling for the identification of unknowns.

Hazardous Materials

Determine if specialized monitoring and survey equipment is necessary to assess the risk.

Hazardous Materials

Provide information acquired during surveys to monitor the fate of the release.

Hazardous Materials

Provide risks assessment information to other agencies involved in chemical incidents.

Hazardous Materials

EVALUATION/RISK ASSESSMENT

Evaluate the risks that the hazardous substances pose to the general public and environment.

Hazardous Materials

Continually monitor the migration of contaminants released during chemical emergency.

Hazardous Materials

Determine the population at risk.

Hazardous Materials

Determine the impact to environmentally-sensitive areas (i.e., endangered species and ecosystems).

Hazardous Materials

Determine the impact to economically-sensitive areas.

Hazardous Materials

**Environmental Health
Hazardous Materials**

Action

Responsibility

SAFETY/CONTROL

Make recommendations for control actions to modify or reduce impact.

Hazardous Materials

Provide information on cleanup techniques and resources.

Hazardous Materials

Can act as "site safety officer" during chemical emergencies.

Hazardous Materials

Make recommendations for cleanup, restoration methods, and disposal of hazardous wastes.

Hazardous Materials

COORDINATION

Coordinate public health mitigation and response activities with other public and private response organizations.

Hazardous Materials

**APPENDIX I-3
DEPARTMENT OF ENVIRONMENTAL HEALTH
EMERGENCY ACTION CHECKLIST**

RESPONSE TO IMMINENT/ACTUAL FLOODING

FLOODING EXPECTED

| <u>Action</u> | <u>Responsibility</u> |
|---|-----------------------|
| Determine potential health hazards and establish standards for control. | DEH |
| Initiate actions to accommodate potential sewerage back-up caused by flood waters. | Land & Water Quality |
| Issue standby orders for self-contained chemical toilets. | Land & Water Quality |
| Inspect mass care facilities. | Food & Housing |
| Enlist additional personnel to handle increased vector control problems. | Community Health |
| Identify buildings that contain hazardous materials. | Hazardous Materials |
| Advise on mitigation and control measures. Take environmental samples to determine extent of contamination. | Hazardous Materials |

FLOODING OCCURS

| | |
|---|----------------------|
| Conduct survey to detect water and sewage system damage. | Land & Water Quality |
| Locate and check status of potable water sources. | Food & Housing |
| Supervise chlorination of transported water. | Land & Water Quality |
| Conduct inspection of health hazards in damaged buildings. | Food & Housing |
| Request and coordinate chemical toilets and other temporary facilities for the disposal of human waste and infected refuse. | Land & Water Quality |

**Environmental Health
Imminent/Actual Flooding**

FLOODING OCCURS

Action

Responsibility

Inspect foodstuffs, water, and other consumables.

Food & Housing

Provide food handling and mass feeding sanitation services in mass care facilities.

Food & Housing

Provide inspection and advice on general sanitation matters, including providing environmental health inspection services.

Food & Housing

Coordinate sanitary facilities in mass care facilities.

Food & Housing

Cordon off areas where effluent is present.

Land & Water Quality

Coordinate the procurement of portable sewage pumps.

Land & Water Quality

Coordinate mosquito and other vector control operations.

Community Health

Advise on mitigation control and clean-up measures.

DEH

Survey underground storage tank sites to determine if tanks have floated and if releases have occurred.

Land & Water Quality

Assess risk to public health and water resources from hazardous materials releases.

Land & Water Quality

Coordinate site assessment and mitigation activities with other public agencies and private entities.

Land & Water Quality

Survey landfills and evaluate damage.

Community Health

Survey transfer stations for water saturated waste/runoff.

Community Health

Monitor the storage, handling and disposal of solid waste.

Community Health

**APPENDIX I-4
DEPARTMENT OF ENVIRONMENTAL HEALTH
EMERGENCY ACTION CHECKLIST**

RESPONSE TO IMMINENT/ACTUAL DAM FAILURE

DAM FAILURE IMMINENT

| <u>Action</u> | <u>Responsibility</u> |
|---|-----------------------|
| Coordinates actions necessary to mitigate potential sewage back-up caused by flood waters. | Land & Water Quality |
| Coordinates acquisition and placement of chemical toilets. | Land & Water Quality |
| Inspect mass care facilities. | Food & Housing |
| Identify additional resources to handle increased vector control problems. | Community Health |
| Enlist additional personnel to handle increased vector control problems. | Community Health |
| Conduct surveys to determine adverse impact to facilities handling, storing, or disposing of hazardous materials. | Hazardous Materials |
| Advise on mitigation, control, and clean-up measures involving hazardous material releases. | Hazardous Materials |

DAM FAILURE OCCURS

| | |
|---|-------------------------------------|
| Coordinate survey to detect water and sewage system damage. | Land & Water Quality |
| Locate and check status of potable water sources and request water transportation to points of consumption. | Food & Housing/Land & Water Quality |
| Supervise chlorination of transported water. | Food & Housing |
| Conduct inspection of health hazards in damaged buildings. | Food & Housing |
| Coordinate chemical toilets and other temporary facilities for the disposal of human waste and refuse. | Land & Water Quality |
| Inspect foodstuffs, water, and other consumables. | Food & Housing |

**Department of Environmental Health
Dam Failure Response**

DAM FAILURE OCCURS (continued)

| <u>Action</u> | <u>Responsibility</u> |
|---|------------------------------|
| Provide food handling and mass feeding sanitation services in mass care facilities. | Food & Housing |
| Provide inspection and advice on general sanitation matters including providing environmental health inspection services. | Food & Housing |
| Coordinate sanitary facilities in mass care facilities. | Food & Housing |
| Cordon off areas where effluent is present. | Land & Water Quality |
| Coordinate the procurement of portable sewage pumps for bypassing damaged sewer systems. | Land & Water Quality |
| Provide mosquito and other vector control. | Community Health |
| Advise on mitigation, control, and clean-up measures. | DEH |
| Conduct surveys to determine adverse impact to facilities handling, storing, or disposing of hazardous materials. | Hazardous Materials |
| Survey underground storage tank sites to determine if tanks have floated and if releases have occurred. | Land & Water Quality |
| Assess risk to public health and water resources from hazardous materials releases. | Land & Water Quality |
| Coordinate site assessment and mitigation activities with other public agencies and private entities. | Land & Water Quality |

**APPENDIX I-5
DEPARTMENT OF ENVIRONMENTAL HEALTH
EMERGENCY ACTION CHECKLIST**

RADIOLOGICAL INCIDENT

| <u>Action</u> | <u>Responsibility</u> |
|---|---|
| Ensure that operations are conducted from an upwind position. | Hazardous Materials/Senior Health Physicist |
| Determine the magnitude of the incident and establish perimeter to prevent spread of contamination. | Hazardous Materials/Senior Health Physicist |
| Identify spilled or leaked substance. This would include locating shipping papers and placards and contacting, as required. | Hazardous Materials/Senior Health Physicist |
| Take necessary steps to protect or save human life. | Hazardous Materials/Senior Health Physicist |
| Establish perimeter controls to keep the public a safe distance from the scene. | Hazardous Materials/Senior Health Physicist |
| Identify radioactive element involved in incident. Evaluate radiological component of the hazard. | Hazardous Materials/Senior Health Physicist |
| Reevaluate perimeters as the radioactive element is identified and/or environmental conditions change. | Hazardous Materials/Senior Health Physicist |
| Assist medical personnel in identifying, isolating and removing contaminated or injured persons from the scene. | Hazardous Materials/Senior Health Physicist |
| Take action to contain and/or prevent the spread of the material. | Hazardous Materials/Senior Health Physicist |
| Ensure OES has been notified. | Hazardous Materials/Senior Health Physicist |
| Recommend evacuation, if necessary. | Hazardous Materials/Senior Health Physicist |
| Maintain radiological exposure records on all emergency personnel. | Hazardous Materials/Senior Health Physicist |
| Coordinate clean-up activities of private radioactive materials companies with RHB. | Hazardous Materials/Senior Health Physicist |
| Advise Public Information Officer of specific radiological information that should be given to the public. | Hazardous Materials/Senior Health Physicist |

APPENDIX II
DEPARTMENT OF ENVIRONMENTAL HEALTH
RADIOLOGICAL PROTECTION

I. GENERAL

A. Introduction

1. This appendix establishes the basic operational concepts, responsibilities and techniques to support governmental efforts to save lives and minimize exposure to radiation in the event of an emergency involving radioactive materials. These emergencies may involve transportation accidents, industrial/medical facility accidents, Navy ships*, or an incident at the San Onofre Nuclear Generating Station.
2. The basic capabilities required for response to a radiological emergency are:
 - a. A radiation monitoring system to detect, measure and report radiation dose rates.
 - b. Trained staff to receive, analyze and evaluate information provided by the monitoring teams.

B. Objectives

1. To establish organizational responsibilities and prescribe those actions required to provide timely and coordinated protective actions to minimize the loss of life and human suffering.
2. Provide a system for monitoring, reporting, processing and analyzing radiological data.
3. Provide technical support to implement radiological countermeasures and situation analysis.
4. Provide a system for receipt and dissemination of information required for effective response and recovery operations.
5. Provide a basis on which local jurisdictions can establish coordinated and supporting plans and Standard Operating Procedures (SOPs).

C. Authorities and References

1. Federal Radiological Emergency Response Plan.
2. California Emergency Services Act.

* See Appendix II-3 for more specific information on Navy ship response.
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3. California Emergency Plan.
4. California Health and Safety Code
 - a. Control of Radioactive Contamination of the Environment (Division 20, Chapter 7, Sections 25600 - 25610).
 - b. Transportation of Radioactive Materials Division 20, Chapter 7.3, Sections 25650 - 25654).
 - c. Radiation Control Law (Division 20, Chapter 7.6, Sections 25800 - 25876).
5. California Administrative Code Title 17.
6. California Master Mutual Aid Agreement.
7. County of San Diego Emergency Services Ordinance No. 8183 dated December 15, 1992.
8. County of San Diego Resolution Adopting the California Master Mutual Aid Agreement, dated December 11, 1950.
9. NUREG - 0654/Rep 1, Criteria for Preparation and Evaluation of Radiological Response Plans and Preparations in Support of Fixed Site Nuclear Power Plants.
10. NUREG - 0610, Draft Emergency Action Level Guidelines for Nuclear Power Plants.
11. Agreement between the State of California and the Nuclear Regulatory Commission (NRC) pursuant to Section 274 of the Atomic Energy Act of 1954, as amended.
12. San Diego County Nuclear Power Station Emergency Response Plan dated December, 1990.
13. Commander Submarine Force U.S. Pacific Fleet Representative, West Coast Procedures for the Notification of the State of California in Support of the Radiological Emergency Plan for Naval Nuclear Propulsion Plants in the San Diego Area.
14. CPG 1-7 Guide for Increasing Local Government Civil Defense Readiness During Periods of International Crisis.
15. State of California Nuclear Blackmail Plan.

D. Coordination With Other Jurisdictions and Agencies

Although the response for radiological emergencies is addressed in various emergency plans, the basic policies and procedures for emergency operations remain unchanged from those used in response to other emergencies or disasters. In most cases the responsibilities assigned in this annex fall within the normal purview of the organization(s) to which these assignments are made.

II. CONCEPT OF OPERATIONS

- A. Preparation for coping with a radiological emergency is a joint cooperative effort by local and state government, federal agencies and private organizations. Each organization or agency must define its role, prepare plans and procedures, train personnel, conduct exercises and develop and maintain the appropriate resources in order to ensure the capability to effectively coordinate with other agencies and to provide effective response to the emergency.

During the normal day-to-day operating mode, emphasis is placed on:

1. Developing plans, standard operating procedures (SOPs) and emergency checklists.
2. Training Radiological Officers, Radiological Monitors and the Radiological Response Team. The Radiological Response Team for the San Diego County Operational Area is the Hazardous Incident Response TEAM (HIRT).
3. Identification of radiological threats or hazards.
4. Maintaining calibrated monitoring equipment.
5. Maintaining a supply of radiological survey instruments. This is accomplished by ODP.
6. Maintaining current list of facilities licensed to store and use radioactive materials.
7. Developing and conducting drills and exercises for emergency personnel (both tabletop and functional exercises).

B. Emergency Response Phase

This phase begins with the threat of a release of radioactive material either from an incident at the San Onofre Nuclear Generating Station, a terrorist threat involving nuclear or radioactive materials, or other events such as major fires threatening facilities with large inventories of radioactive materials.

Smaller incidents, such as those that may arise from transportation accidents, will usually be handled by DEH/HMD normal response procedures but may require full or partial implementation of this plan.

Actions required during this phase may include:

1. Activating the Operational Area and local EOCs
2. Reviewing/updating plans, SOPs and checklists
3. Testing/inventory of equipment, supplies and facilities
4. Distributing equipment to monitoring teams
5. Dissemination of radiological protection guidance
6. Providing radiological protection information to the public
7. Assigning radiological monitors as necessary
8. Activating medical care facilities, first aid stations, etc
9. Activating emergency communications systems such as Radio Amateur Civil Emergency Service (RACES) and the Emergency Alert System (EAS)
10. Mobilization and prepositioning of personnel and equipment

C. Recovery Phase

1. Early Recovery

This phase continues the assessment of radiological hazards to determine if they are a threat to life or health. Direct exposure hazards, as well as hazards from water sources and the food chain, must be identified. Decontamination of critical facilities will be undertaken.

2. Final Recovery

The objective is to restore the environment to a safe radiation level as quickly as possible. All areas will be carefully monitored to determine the degree of contamination with appropriate actions taken to reclaim such areas for human habitation as soon as possible.

D. Activation

1. The Emergency Services Coordinator, or his/her designated representative (as outlined in the basic portion of Annex H), may direct this appendix be activated upon receiving information of an actual or potential radiological emergency in the Operational Area.

2. This appendix shall be activated in the event of a nuclear terrorist threat anywhere within the Operational Area.
3. Upon activation, the Operational Area Radiological Officer (RO) will:
 - a. Receive, collate and assess data from the radiological monitoring teams.
 - b. Forward all radiological data, operational information and situation intelligence summaries to the State OES Southern Region.
 - c. Maintain dose and exposure records for emergency response personnel within the unincorporated area.
 - d. Ensure response personnel read their personal dosimetry equipment at appropriate intervals and in no case less frequently than once an hour.
 - e. Establish and maintain coordination with local government Radiological Officers, the Senior Radiological Health Physicist and appropriate private agencies.
 - f. Advise senior decision makers on the radiological situation.
 - g. Coordinate information with the Operational Area Public Information Officer (PIO).
 - h. Provide an Operational Area-wide overview of the radiological situation to officials and the public.
4. Radiological Monitoring Teams - Operate the radiological monitoring instruments and report the data. Each team consists of a minimum of two trained monitors. Radiological monitors will be assigned as required. Decontamination of personnel and property will be conducted by assigned teams in accordance with the San Diego County Standard Operating Procedures (NCs).
5. Emergency response personnel will not be permitted to receive radiation doses exceeding EPA protective action guides (PAGs) without the approval of the County Health Officer.
6. Emergency workers who may be exposed to high levels of radioactive iodine will be directed by the County Health Officer to take Potassium Iodide (KI). The purpose for administering KI is to limit the uptake of radioactive iodine by the thyroid. KI will not be issued to the general population since other methods will be employed to limit their dose.
7. Local Radiological Officers will perform those functions listed under the Operational Area Radiological Officer for their respective jurisdictions.

E. Deactivation

This Appendix will be deactivated at the discretion of the Emergency Services Coordinator or his/her designated representative.

III. ORGANIZATION AND RESPONSIBILITIES

The Operational Area will respond to a radiological emergency as outlined in this plan and the Standard Operating Procedures (NCs). The San Diego County Nuclear Power Station Emergency Response Plan (SDCNPSERP) will be used for events at the San Onofre Nuclear Generating Station.

Local Governments

The Emergency Services Director for each jurisdiction has ultimate responsibility for direction and control of that jurisdictions response actions.

Each jurisdiction is responsible for:

- A. Planning for the safety of employees and the protection of property in the event of a radiological emergency.
- B. Coordinating plans and actions with other jurisdictions and agencies within the Operational Area.
- C. Maintaining SOPs and call lists.
- D. Training personnel assigned to emergency tasks.
- E. Participating in drills and exercises.
- F. Preparing damage and loss survey reports.

IV. SUPPORTING ORGANIZATIONS AND RESPONSIBILITIES

A. State Agencies

- 1. Office of Emergency Services (OES)
 - a. Provide radiological training.
 - b. Organize and staff the State Dose Assessment Center.
 - c. Manage state radiological fallout and monitoring system.
 - d. Disseminate radiological intelligence.

- e. Evaluate monitoring data and advise those concerned.
 - f. Act as liaison between Federal and local government.
 - g. Provide technical guidance.
 - h. Coordinate radiological recovery operations.
 - i. Coordinate state agency assistance to local governments.
 - j. Maintain the State Nuclear Power Plant Emergency Plan.
 - k. Monitor and evaluate data, then advise those concerned.
2. OES Southern Region Staff
- a. Function as an intermediate coordinating level (Regional EOC) between the Operational Area and the State Operations Center (SOC).
 - b. Compile and transmit operational information and situation intelligence summaries to the SOC and Operational Areas.
3. Other State agencies that have responsibilities during a radiological emergency response are:
- a. Department of Health Services, Radiological Health Branch
 - b. Emergency Medical Services Authority
 - c. California Highway Patrol
 - d. California Department of Transportation (CalTrans)
 - e. Department of Justice
 - f. Department of Forestry and Fire Protection (CDF)
 - g. National Guard
 - h. Department of Fish and Game (DFG)

B. Federal Agencies

- 1. Federal Emergency Management Agency (FEMA): Coordinate Federal response actions and agencies.
- 2. Other Federal Agencies : May assist by providing support or services as requested by State or Local governments.

APPENDIX II-1
RADIOLOGICAL PROTECTION
FIXED NUCLEAR POWER STATION
EMERGENCY RESPONSE PLAN

I. PURPOSE

To develop and maintain a response capability to adequately safeguard life and property in the event of an incident at the San Onofre Nuclear Generating Station (SONGS).

II. CONCEPT OF OPERATIONS

The nature of the threat posed by SONGS coupled with the requirements of NUREG 0654 and those imposed by the Interjurisdictional Planning Committee dictate that a separate plan for this emergency be developed and maintained. The current plan for such an emergency is the San Diego County Nuclear Power Station Emergency Response Plan adopted February, 1982 and last updated December, 1990. That plan, by reference, is made a part hereof.

APPENDIX II-2
RADIOLOGICAL PROTECTION
NUCLEAR TERRORIST EMERGENCY
RESPONSE PLAN

I. PURPOSE

To develop and maintain a response capability to minimize the threat to public safety caused by a terrorist action involving nuclear weapons or radiological material.

II. BACKGROUND

A. General

Terrorist activities around the world continue to increase in sophistication. More ominously, terrorist attacks appear to be aimed towards maximizing damage and publicity rather than the accomplishment of political goals. When this is combined with the fact that weapons grade nuclear material is becoming increasingly more common, the possibility of a terrorist act involving nuclear weapons also increases.

B. Scenario

The scenario for a nuclear terrorist threat would most probably begin with the theft of weapons grade fissionable material (from which a bomb is made) or of a weapon itself from a military base or a Department of Energy (DOE) weapons shipment. Federal, State or Local governments may be notified of the presence of a nuclear weapon by the terrorist organization.

C. Credibility

The credibility of the threat would depend on knowledge of any previous theft of fissionable material or nuclear weapon and any knowledge of the nature of the terrorist group. The most important information required is an assessment of the ability of the terrorists to successfully detonate the weapon. Evaluation of the situation would be performed by the FBI, Department of Defense (DoD), DOE, and other federal agencies assisted by state and local law enforcement organizations.

III. CONCEPT OF OPERATIONS

A. Activation

1. Upon receipt of information of a nuclear threat by a terrorist group, the Emergency Services Coordinator, or his/her designated representative, may proclaim a Local Emergency for the San Diego County Operational Area and activate the Operational

Area EOC. Once a Local Emergency is proclaimed the Emergency Services Coordinator may request the declaration of a State of Emergency from the Governor.

2. Upon activation of the Operational Area EOC radiological resources within the Operational Area will be mobilized to respond to the threat. The State Office of Emergency Services will be notified through the OES Southern Region.

B. Deactivation

This Appendix will be deactivated at the discretion of the Emergency Services Coordinator, or his/her designated representative.

C. Response

1. The nature of the response would depend on:
 - a. Nature of the threat. It is possible that the terrorists may threaten to detonate the device if any public protective measures are taken.
 - b. Size of the threatened population and the length of time available for evacuation.
 - c. Size and type of weapon.
2. Protective measures may take two forms:
 - a. Evacuation of the population at risk.
 - b. Sheltering actions.
3. The situation will determine which is the best course of action. If the weapon is located in a heavily populated area and there is little time before the threatened detonation, evacuation may not be possible. In this case, protective sheltering actions would be called for.

D. Effects of Detonation

1. The overall impact of the detonation of a single nuclear device would be devastating to the immediate area. However, the infrastructure of the Operational Area would remain intact, allowing for rapid rescue and decontamination actions.
2. While the immediate response actions would center around rescue and decontamination operations, equally important will be those activities aimed at preventing contamination of the water or food chain in outlying areas. Long range responses will include long term medical care and screening of survivors and emergency response personnel who have received exposure to radiation.
3. All of these activities will require Federal and State resources.

APPENDIX II-3 RADIOLOGICAL PROTECTION

REACTOR ACCIDENT ONBOARD A U.S. NAVY NUCLEAR POWERED VESSEL IN-PORT SAN DIEGO, OR ONBOARD A MILITARY FACILITY

I. PURPOSE

To develop and maintain a response capability to minimize the threat to public health and safety resulting from an accident involving a nuclear power plant onboard a U.S. Navy ship while it is in-port in San Diego harbor.

II. BACKGROUND

A. General

1. Although the likelihood of a reactor accident occurring in U.S. Naval nuclear powered ships is extremely remote, prudence dictates that provisions be made to deal with such an occurrence. At any given time there may be one, or more, nuclear powered aircraft carriers, surface ships or submarines in-port in San Diego.
2. It is the policy of the Department of the Navy to ensure that State or Local officials are notified of occurrences that might cause concern because of radiological effects outside the plant. Such occurrences will not necessarily be emergencies, alerts or unusual events.

B. Classification/Emergency Action Levels

This Section covers the different action levels which can be declared by a plant's emergency action plan (10 CFR 50, Appendix E). If an event occurs at a nuclear reactor (fixed or mobile), from a simple valve failure to the loss of the fission product barriers, the emergency action plan will provide guidance on event classification. Depending upon the severity of the event, the emergency plan will categorize it as an **UNUSUAL EVENT**, an **ALERT**, a **SITE AREA EMERGENCY**, or a **GENERAL EMERGENCY**.

The Emergency Action Levels have been established to provide prompt notification to the proper authorities of both minor and major events. Depending upon the severity of the event, the actions taken could range from notifying the Nuclear Regulatory Commission to the staffing of the emergency response facilities and the notifying of local, state, and federal agencies.

1. **UNUSUAL EVENTS** are minor events which have occurred, or are in process, which indicate a potential for degradation of the level of safety of the plant. Releases of radioactive material requiring offsite response or monitoring are not expected, unless further degradation of safety systems occurs. The specific onsite and offsite agencies that are activated/notified will be determined by the specific

action plan. For example, assistance could be requested of the local law enforcement offices, local fire department, or local hospitals. Initiating Conditions for Unusual Events:

- a. Abnormal fuel temperature
- b. Abnormal reactor coolant temperature
- c. Earthquake
- d. Emergency core cooling systems actuation
- e. Explosion onsite (no effect on safety-related equipment)
- f. Fire (no effect on safety-related equipment)
- g. High reactor coolant system activity
- h. Personnel injury
- i. Security threat (unauthorized entry of individuals)
- j. Shutdown required by plant Technical Specifications

The purposes of this emergency classification are to:

- a. Assure that the first step in any response later found to be necessary has been carried out,
- b. Bring the operating staff to a state of readiness, and
- c. Provide systematic handling of unusual event information and decision making.

2. **ALERT** conditions are events which have occurred or are in progress that involve actual or potential significant degradation in the level of safety of the plant. Minor releases of radioactive material are possible during the events associated with an ALERT, however, any release that occurs is expected to be a very small fraction of the allowed exposure levels. The specific onsite and offsite agencies to be notified/activated will be determined by the action plan. For example, certain state and local organizations would be notified and would respond, if needed. Initiating Conditions for Alert:

- a. Excessive primary leakage
- b. Failure of a reactor coolant pump
- c. Fire (does have an effect on safety systems)
- d. Fuel handling accident
- e. High radiation levels in the plant
- f. Inability to reach cold shutdown
- g. Inability to shutdown the reactor
- h. Loss of AC or DC power
- i. Security threat (penetration of protected area)
- j. Severe damage to fuel cladding
- k. Steam generator tube rupture
- l. Steam line break

The purposes of this emergency classification are to:

- a. Assure that emergency personnel are readily available to respond if situation warrants,
- b. Perform confirmatory radiation monitoring if required, and
- c. Provide offsite agencies with current information.

3. **SITE AREA EMERGENCY**- events which are in progress or have occurred that involve actual or likely failure of plant functions needed for the protection of the public. The potential of significant releases of radioactive material exists, but these releases are not expected to exceed exposure limits (except possibly near the site boundary). Severe core damage has not occurred, but extensive offsite radiation monitoring and protective actions may be required. Many onsite and offsite agencies will be notified and activated. For example, the local Emergency Operations Centers will be fully activated, and the public will be notified. Initiating Conditions for Site Area Emergency:

- a. Control room evacuation with no local control in 15 min.
- b. Core damage with potential loss of coolable geometry
- c. Fire (compromises functions of vital safety systems)
- d. High measured offsite doses
- e. Loss of coolant greater than makeup capability
- f. Loss of AC and DC power for more than 15 minutes
- g. Security threat with imminent loss of plant control
- h. Toxic gas preventing access to vital areas
- i. Unisolable steam break outside of containment

The declaration of a SITE AREA EMERGENCY will:

- a. Assure that appropriate response centers are manned,
- b. Assure that monitoring teams are dispatched,
- c. Assure that personnel required for evacuation of nearsite areas are available if needed,
- d. Provide consultation with offsite authorities, and
- e. Provide updates to the public through offsite authorities.

4. **GENERAL EMERGENCY** - The highest level of action. This classification is characterized by events in progress, or that have occurred, which involve actual or imminent substantial core damage with the potential for the loss of containment integrity. The release of radioactive material can be expected to exceed protective guidelines. Extensive offsite radiation monitoring, the projections of doses to the public, and other protective actions may be required. All onsite and offsite agencies are fully activated. The public will be notified and necessary protective measures (shelter-in-place or evacuation, for example) shall be recommended.

The purposes of **GENERAL EMERGENCY** are to:

- a. Be prepared to initiate predetermined protective actions for the public,
- b. Provide continuous dose assessment based upon available information,
- c. Initiate additional measures as indicated by actual or potential releases,
- d. Provide consultation with offsite authorities, and
- e. Provide updates for the public through offsite authorities.

A common theme to all of these classifications is that with more severe damage to the fission product barriers and with a fewer number of safety systems available to counteract the accident, the higher the probability of a release to the public.

1. Event classifications will either be upgraded or downgraded by the Navy as the incident progresses and additional information becomes available.
2. Events which do not involve release of radioactivity or the potential for release or do not involve the safety of the plant but may cause concern about radiological effects outside the plant will be reported to State or Local officials.

C. Term of Event

Projected dose commitments and dose rate equivalents assume an 8 hour accident term.

III. CONCEPT OF OPERATIONS

A. Notification

1. The normal sequence of events for notification would be for the Commander Submarine Force U.S. Pacific Fleet Representative, West Coast (COMSUBPACREP WEST COAST) to notify OES who would, in turn, notify the Office of Disaster Preparedness (ODP). ODP will, in turn, notify the surrounding cities of Coronado, San Diego, Chula Vista, National City and Imperial Beach.
2. Should the urgency require, COMSUBPACREP WEST COAST will concurrently notify ODP and the cities of Coronado, San Diego, Chula Vista, National City and Imperial Beach direct. State OES will then be informed by COMSUBPACREP WEST COAST of their notification of the Operational Area.
3. Any notification of an accident involving a Navy nuclear power plant will be verified by calling the COMSUBPACREP WEST COAST duty officer.

B. Specific Response Actions

1. Upon verification of an Unusual Event, the ODP Staff Duty Officer (SDO) will notify the Director, ODP and the other operations officers, as appropriate. ODP will, as noted above, notify the surrounding cities of Coronado, San Diego, Chula Vista, National City and Imperial Beach.

2. Upon verification of an Alert or higher classification event, the Operational Area EOC will be activated in accordance with the Standard Operating Procedures (NCs).
3. This document and the NCs will be the base document governing the Operational Area's response to an event at a Naval nuclear propulsion plant. The notification procedure contained in NC #4 will be instituted when activating this appendix.
 - a. Notify the City of San Diego Fire Communications Center. Request that City (HAZMAT) Radiological Monitoring teams be mobilized.
 - b. Notify the City of Oceanside and request the Radiological Monitoring (RadMon) Teams be placed on standby. If the situation warrants, the RadMon teams may be requested to stage at the Operational Area EOC to facilitate their use in a timely manner.
 - c. Notify the cities of National City, Coronado (Police/Fire Communications), Imperial Beach and Chula Vista if the incident is at the Naval Station, or onboard a vessel in the harbor.
 - d. Notify the County Health Officer and the Department of Environmental Health and request the County Health Officer and Health Physicist report to the Operational Area EOC.
 - e. All other notifications will be made in accordance with NC#4.

C. Activation

1. This tab shall be activated by the Emergency Services Coordinator, his/her designated representative or the Director, ODP whenever the County has verified an incident onboard a Navy nuclear powered ship, or on a Naval facility which has a classification of Alert or higher.
2. If the ODP SDO believes the situation requires it, he/she may begin notification prior to receiving authorization to activate the Operational Area EOC.

D. Deactivation

This appendix shall be deactivated whenever the initiating event is downgraded to Unusual Event, is closed out or at the discretion of the Emergency Services Coordinator or his/her designated representative.

**APPENDIX II-4
RADIOLOGICAL PROTECTION**

**EMERGENCY ACTION CHECKLIST FOR RADIOLOGICAL RESPONSE
MAJOR EARTHQUAKE**

| <u>Action</u> | <u>Responsibility</u> |
|---|------------------------------|
| If little/no damage reported prepare to support and assist more heavily damaged jurisdictions. | Director, ODP |
| If extensive damage reported, take the following actions: | |
| Verify reports. | ODP SDO |
| Determine if any damage reports involve radiological material. | All Radiological Officers |
| Alert radiological monitoring personnel of any reported radiological incidents. | All Radiological Officers |
| Dispatch monitor team(s) to survey and report damage. | All Radiological Officers |
| Provide protective actions as required for each incident. | All Radiological Officers |
| Ensure radiological exposure records properly maintained for radmon personnel. | All Radiological Officers |
| Keep responders informed of areas threatened by radiological hazards. | All Radiological Officers |
| Determine current and forecasted wind conditions and predict the winds affect on dispersion of radioactive particles. | All Radiological Officers |
| Assure priority given to life-saving actions. | Incident Commander |
| Establish safe access controls to damaged/contaminated areas and assist people to safe areas. | Incident Commander |
| Recommend evacuation, if necessary. | All Radiological Officers |
| Obtain transportation, supplies and equipment needed for response teams. | All Radiological Officers |
| Provide radiation monitors for areas without qualified personnel. | All Radiological Officers |

**APPENDIX II-5
RADIOLOGICAL PROTECTION**

**EMERGENCY ACTION CHECKLIST FOR RADIOLOGICAL RESPONSE
HAZARDOUS MATERIALS INCIDENT**

| <u>Action</u> | <u>Responsibility</u> |
|---|--|
| Ensure that operations are conducted from an upwind position. | Incident Commander |
| Determine the magnitude of the incident and establish perimeter to prevent spread of contamination. | Incident Commander |
| Identify spilled or leaked substance. This would include locating shipping papers and placards. | Incident Commander |
| Take steps necessary to protect or save human life. | Incident Commander |
| Establish perimeter controls to keep the public a safe distance from the scene. | Incident Commander |
| Reevaluate perimeters as the radioactive element is identified and/or environmental conditions change. | All Radiological Officers |
| Assist medical personnel in identifying, isolating and removing contaminated or injured persons from the scene. | RadMon Team |
| Take action to contain and/or prevent the spread of the material. | Incident Commander |
| Ensure OES has been notified. | Incident Commander |
| Recommend evacuation, if necessary. | All Radiological Officers |
| Maintain radiological exposure records on all emergency personnel. | All Radiological Officers |
| Coordinate clean-up activities of private radioactive materials companies with RHB. | All Radiological Officers |
| Advise Public Information Officer of specific radiological information that should be given to the public. | Incident Commander/ All Radiological Officers |

**APPENDIX II-6
RADIOLOGICAL PROTECTION**

**EMERGENCY ACTION CHECKLIST FOR RADIOLOGICAL RESPONSE
IMMINENT/ACTUAL FLOODING**

FLOODING EXPECTED

| <u>Action</u> | <u>Responsibility</u> |
|--|---------------------------|
| Establish liaison with EOC and provide technical support. | All Radiological Officers |
| Prepare to relocate radiological equipment from flood plain. | All Radiological Officers |
| Provide monitoring support for flood fighting activities where required. | All Radiological Officers |
| Contact Radiological Health Branch to ascertain if any licensed facility has problems requiring attention. | Op Area Rad. Officer |
| Stand by to provide support as the situation develops. | All Radiological Officers |
| Provide advice to licensees on how to protect their facilities. | All Radiological Officers |

FLOODING OCCURS

| | |
|--|---------------------------|
| Provide monitoring support for rescue operations if required. | All Radiological Officers |
| Provide support on damage assessment teams. | All Radiological Officers |
| Report situation and support requirements to OES Southern Region via Operational Area EOC. | All Radiological Officers |

**APPENDIX II-7
RADIOLOGICAL PROTECTION**

**EMERGENCY ACTION CHECKLIST FOR RADIOLOGICAL RESPONSE
IMMINENT/ACTUAL DAM FAILURE**

DAM FAILURE IMMINENT

| <u>Action</u> | <u>Responsibility</u> |
|---|---------------------------|
| Prepare to relocate any radiological equipment in inundation areas. | All Radiological Officers |
| Provide monitoring support, if needed, to workers in inundation areas. | All Radiological Officers |
| Establish liaison with, and provide technical support to, the EOC. | All Radiological Officers |
| Provide advice to licensees on how to protect their facilities and secure their material. | All Radiological Officers |
| Stand by to provide support as the situation develops. | All Radiological Officers |

DAM FAILURE OCCURS

| | |
|--|---------------------------|
| Stand by to provide support: | All Radiological Officers |
| Monitoring for rescue operations | |
| Support for damage assessment teams | |
| Report on situation and requirements to OES Southern Region, via Operational Area EOC. | All Radiological Officers |